

GENERIC · POWERTRAIN

P34B8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P34B8

B Camshaft Position Actuator Temperature Sensor Circuit Bank 2

P34B8 indicates that the powertrain control module has detected an abnormal signal from the bank 2 camshaft position actuator temperature sensor circuit, which monitors the temperature of the variable valve timing actuator. The computer compares the sensor's voltage or resistance against expected values and sets this code when the reading falls outside the valid range for a calibrated time period.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or engine misfire when the variable valve timing system is not operating correctly
- Reduced engine performance or power, especially at low RPM
- Poor fuel economy due to incorrect camshaft timing
- In rare cases, the engine may enter limp mode or stall when the actuator temperature is implausible

Common causes, most likely first

- 1 Faulty camshaft position actuator temperature sensor on bank 2
- 2 Damaged or corroded wiring or connector at the sensor or actuator
- 3 Open or short circuit in the sensor signal or ground circuit
- 4 Failed variable valve timing actuator that is overheating or mechanically binding
- 5 Contaminated engine oil or sludge blocking oil passages to the actuator, causing abnormal temperatures
- 6 Powertrain control module software issue or internal fault (less common)

How to diagnose and fix it

- 1 Use a scan tool to verify P34B8 is current and check for related codes in other modules
- 2 Inspect the sensor connector and wiring for damage, corrosion, or loose pins
- 3 Measure the sensor's resistance or voltage and compare to the manufacturer's specification
- 4 Check the engine oil condition and level; change oil and filter if contaminated or overdue
- 5 Test the variable valve timing actuator for mechanical freedom and oil flow
- 6 Replace the camshaft position actuator temperature sensor if faulty
- 7 If the sensor and wiring are good, diagnose the actuator circuit and the powertrain control module as needed



Oil quality and wiring often cause this code

- A degraded or incorrect viscosity engine oil can cause the variable valve timing actuator to overheat, triggering this code even when the sensor itself is fine.
- The sensor shares wiring with other engine components, so a chafed harness or a bad ground can set P34B8 without any fault in the sensor.
- Technicians sometimes replace the sensor only to find the connector terminals are spread or corroded, so always perform a voltage drop test under load.
- This code can be set by a momentary glitch during cold starts, so clear it and test-drive before condemning parts if no drivability symptoms exist.
- A failing bank 2 variable valve timing solenoid can cause the actuator to stick and overheat, leading to this code even though the sensor circuit tests normal.

Can I keep driving with P34B8?

You can usually continue driving if the only symptom is the warning light, but avoid heavy acceleration or towing until the fault is repaired. If the engine runs rough, misfires, or enters limp mode, have the vehicle inspected promptly to prevent damage to the variable valve timing system.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and basic hand tools
- Oil pressure gauge (optional for actuator testing)

Reading P34B8

P	Powertrain: engine, transmission and emissions.
3	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
4	Auxiliary emission controls.
B8	The exact fault within that area.

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0012** 'A' Camshaft Position - Timing Over-Retarded (Bank 1) · **P0013** 'B' Camshaft Position - Actuator Circuit (Bank 1) · **P0014** Exhaust Camshaft Position - Over-Advanced (Bank 1) · **P0021** 'A' Camshaft Position - Timing Over-Advanced or System Perfo



See it working

Watch the animated explainer **Four-Stroke Engine Cutaway: Intake to Exhaust** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p34b8/>

